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APPLICATION NO.	FILING D	ATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,569	04/21/2	004	Bettina Siggelkow	2003DE419	5297
Clariant Corpo	7590 ration	EXAMINER			
Industrial Prop	erty Departme	ent .	TOOMER, CEPHIA D		
4000 Monroe F Charlotte, NC 2				ART UNIT	PAPER NUMBER
,			•	1714	
			•		
·				MAIL DATE	DELIVERY MODE
	•	-		07/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/828,569	SIGGELKOW ET AL.				
Office Action Summary	Examiner	Art Unit				
	Cephia D. Toomer	1714				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
7						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)  Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-10 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc		Fxaminer				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)		(DTO 442)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summar Paper No(s)/Mail D	y (P10-413) Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	5) Notice of Informal 6) Other:					

Application/Control Number: 10/828,569

Art Unit: 1714

#### **DETAILED ACTION**

### Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is rejected because "demulsifing" should read –demulsifying--. At line 2, it is believed that the first occurrence of "the" should read –to --.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/828,569

Art Unit: 1714

5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5,743,923).

Davies teaches a fuel oil composition comprising a blend of biofuel and petroleum-based fuel oil and an ethylene-unsaturated ester copolymer (see abstract). Davies teaches that the invention is applicable to mixtures of the fuels in all proportions, but prefers 5-75% biofuel (see col. 2, lines 66-67; col. 3, lines 1-5). The unsaturated ester monomer of the ethylene copolymer has the formula –CH<sub>2</sub>CRR<sup>30</sup> wherein R is H or CH<sub>3</sub> and R<sup>30</sup> represents a COOR<sup>3</sup> group or a OOCR<sup>4</sup> group wherein R<sup>3</sup> and R<sup>4</sup> independently represent a hydrocarbyl group (see col. 3, lines 24-32).

Davis defines hydrocarbyl as a group having a carbon atom directly attached to the rest of the molecule and having a hydrocarbon or predominantly hydrocarbon character. The groups may contain non-hydrocarbon substituents such as hydroxyl (see col. 3, line 62 through col. 4, lines 1-11). The copolymer may also contain units selected from olefins (see col. 4, lines 38-40). The unsaturated ester represents from 5 to 40 mole percent of the copolymer (see col. 4, lines 58-61). The copolymer has an average molecular weight from 2,000 to 14,000 (see col. 4, lines 62-65). The fuel

Application/Control Number: 10/828,569

Art Unit: 1714

composition contains from 0.0005 to 1% of the copolymer (see col. 6, lines 13-16).

Davies teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Davies differs from the claims in that he does not specifically teach the OH number of the olefinically unsaturated compound. However, no unobviousness is seen in this difference because Davies teaches olefinically unsaturated monomers that are within the scope of the present invention and it would be reasonable to expect that the monomers would possess an OH number within the claimed range, absent evidence to the contrary.

7. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5,743,923) in view of Krull (US 5,998,530).

Davies is silent with respect to the addition of an alkylphenol-formaldehyde resin to his composition. However, Krull teaches this difference.

Krull teaches that alkylphenol-aldehyde resins such as those set forth in present claim 8 improve the flowability of mineral oil distillates (see abstract; col. 5, lines 1-37; col. 8, lines 16-37).

It would have been obvious to one of ordinary skill in the art to combine the ethylene copolymer and alkylphenol-aldehyde resin because Krull teaches that the flowability of the oils may be improved by combining such additives (see abstract; col. 3, lines 22-32).

Application/Control Number: 10/828,569 Page 5

Art Unit: 1714

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cephia D. Toomer

Art Unit 1714